

I Claim

1. An improved balance shoe comprising a balance shoe housing, shaped to move in a window frame channel, said channel having at least a base section and two side sections extending from the base section, said balance shoe housing having pivot member, which engages a pivot bar that is attached to a window sash such that when a window is tilted, the pivot member rotates and forces a support plate against the base section of the window channel, said pivot member being generally circular with a flat upper portion said upper portion having a first raised member and a second raised member, said first and second raised members contacting first and second recessed engagement portions on the underside of a support plate, said engagement portions of said support plate comprising of a first diagonal portion, a second diagonal portion, and a flat portion in between said diagonal portions, said first and second raised members extending said support plate outwardly when said pivot member is rotated and said first and second raised members are no longer contacting said recessed portions.

2. The balance shoe of claim 1 wherein said pivot member has an oval shaped head portion, a circular middle portion, and a circular lower portion.

3. The balance shoe of claim 1 wherein the balance shoe housing uses a stability member to prevent the device from deforming due to compressive force in the window jamb channel.

4. The balance shoe of claim 3 wherein said stability member has at least one slot which will allow for minimal determination due to compressive force.

5. The balance shoe of claim 4 wherein said stability member is made of metal.

6. The balance shoe of claim 5 wherein the stability member fits between the side surfaces of said balance shoe housing.

7. The balance shoe according to claim 1 wherein said pivot member has a generally circular middle portion and a generally circular lower portion.

8. The balance shoe according to claim 7 wherein there is a generally rectangular opening cut completely through said middle portion, and up to an outer back edge of the lower portion.

9. The balance shoe according to claim 8 wherein the middle portion and lower portion have diagonal cuts and at said opening.

10. The balance shoe according to claim 1 wherein said pivot member has a flat upper portion that comprises a major portion of the upper surface of said pivot member.

11. The balance shoe according to claim 11 wherein said first raised member and said second raised member have flat side surfaces, rounded upper corners, and a flat upper surface.